

Mr. Montgomery

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Welcome to my class

We learn more from our mistakes and others can learn from your mistakes.

Don't be afraid to make one.

Take the time to rethink and justify your thinking mathematically.

Course Description:

Math 1 will continue to build a foundation for work with expressions, equations, and functions. Students will deepen their understanding of linear relationships. They will also use properties and theorems involving congruent figures to deepen understanding of geometry. Finally, this course will tie together the algebraic and geometric ideas studied throughout the year. As with all Math courses, students will be expected to apply the Mathematical Practice Standards in order to experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of and solve problems. Math 1 will also prepare students for Math 2.

(In words you understand: you will learn one semester of algebra 1 and one semester of geometry.)

Math 2 is an intermediate-level course in algebra designed to prepare students for college algebra. Students will explore traditional algebra topics at both conceptual and a procedural levels. Students will learn to employ a variety of approaches, including algebraic, graphical, tabular, and technological methods, to solve problems rather than relying on strictly algorithmic methods.

(In words you understand: you will learn one semester of algebra 2 and one semester of geometry.)

Math 3 is a problem centered approach and includes content standards from Algebra 1, Geometry, Algebra 2 and Statistics at an intermediate to advanced level including coordinate geometry, circles and other conic sections, binomial distributions, permutations and combinations, exponential and logarithmic functions, rates of change, derivatives, trigonometry and quadratics. The course requires that students further develop the logic needed for abstract problem solving and emphasizes the common core standards through examining polynomial functions, exponents and logs, trigonometric functions (equations and applications) triangle trigonometry (law of sine and cosine) trigonometric addition formulas, and solving trigonometric equations. The second semester examines analytic geometry, polar coordinates, geometric representation of complex numbers, powers of complex numbers, roots of complex numbers, vectors and determinants, sequences, series, limits and iterated functions, and introduction to calculus, including finding derivatives of curves, using derivatives in curve sketching, extreme value problems, and velocity and acceleration.

(In words you understand: you will learn one semester of algebra 2 and one semester of trigonometry.)

Supplies:

- Pencil (No pens please)
- Lined Paper
- Calculator if owned, this is not required for this class

Classroom Rules:

1. Do not talk while I am teaching.
2. Respect others. (don't stop someone else from learning)
3. Come prepared to class. (you will need 3 things everyday)
4. No swearing.
5. No food, or drinks in class. (water is allowed) (this depends on the class sometimes)
6. No throwing objects.
7. No phones or music devices.

Grading Scale:

A+	100-97	B+	89-87	C+	79-77	D+	69-67	F	59-0
A	96-94	B	86-84	C	76-74	D	66-64		
A-	93-90	B-	83-80	C-	73-70	D-	63-60		

Students will be graded on:

- tests/quizzes (about 75% to 80%)
- assignments (about 20% to 25%)

Tests and Quizzes:

- Tests will be given at different intervals throughout the term.
- Students will generally have at least one days' notice before a test or quiz.
- A student may re-take any test or quiz as many times as they want. (to a certain extent)

Class work/Assignments:

Students are expected to complete all class work assignments in the given time. Most assignments will be able to be completed in class **if students are motivated to do so.**

Students will show **all work** and the answer. If the problem can be done on the calculator then the student must show what was typed in the calculator to get the answer.

Notes:

Your notes need to be neat and properly labeled. Notes will be allowed on all tests and quizzes.

Classroom Procedures:

1. Be prepared for class every day. (You need to come with 3 things everyday)
2. Always raise your hand if you have questions and/or comments.
3. If you need to sharpen your pencil while I am instructing, don't!
Come prepared with another pencil.
4. Neatness and precision are a MUST. Many wrong answers can be avoided by carefully and neatly writing each mathematical step.
5. Cell phones and other electronic devices are not to be out in my classroom. If I see it, I will take it to the office.
6. Restroom / Water Fountain:
Write name on board.
Only the person at the top of the list may leave. (only one person gone at a time)
Upon your return erase your name.
Then next person can go.
7. Locker and office visits should be done outside of class time.
8. Backpacks, purses and personal property should be placed in your locker.
9. Remain in your seat until I have excused you. **Don't wait by the door!**
10. Classroom Attendance and Tardy Policy: See Terra Student handbook.
11. My classroom will follow Terra policies regarding academic integrity and cheating.
12. My classroom follows all other policies already in place set forth by Terra and the school district.

Absent:

- Copy all notes and warm-ups from another student in the class or my website. (This should be completed on your own time not during warm-up activity or during the new lesson.)
- Get assignment/homework from another student or from my website.
- Get the appropriate tutoring from whomever you can to learn the topic. Other students in class, other Math Teachers at Terra (before/after school), other students at Terra, look online for tutorials on the topic, or myself. Remember this is your education. Every topic in math is a building block for future math classes. **It is your responsibility** to do what you need to learn each concept, but again, I will help you in any way that I can.

Absent students will have an extra day and can still earn full credit if work is turned in the day after they return to school.

What a typical class will look like:

- Students enter class before tardy bell with all materials in hand and every problem on their homework complete with work shown.
- Students will find their seat. We will begin the year with assigned seating.
- This is the time for students to ask questions about homework and missed problems. When questions/answers are complete students will then turn their work in.
- When class work has been submitted. I will present a new lesson. You will be expected to take notes and participate in the class activity. Active participation is required and important for your learning.
- When this lesson is complete, time will be given for students to work on the assignment. Don't waste the last few minutes of class. You need to take advantage of this time and the help you could receive if necessary. This is the time for students to get one-on-one help from the teacher if necessary.